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EXAMINER
CHAVIS, JOHN Q

ART UNIT	PAPER NUMBER
2193	

NOTIFICATION DATE	DELIVERY MODE
09/26/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *10 July 2007*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-6,8,9,11-25 and 28-34* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-6,8,9,11-25 and 28-34* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   The claimed invention in claims 1-12 are directed to non-statutory subject matter. The claims appear to be merely non-functional descriptive material, see the discussion below in item 3. **The claims are still considered non-statutory. Although the applicant has attempted to make the components functional, no attempt has been made to provide actual hardware components. In a system claim, hardware components are expected. Therefore, even if the claimed components are considered functional, they would are not statutory because none of the components are specifically tied to a system (a hardware device). Furthermore, the second component is still considered non functional; since, the newly added portion is also descriptive information (that describes). The dependent claims do not cure the problems associated with their respective parent claim. For example, claim 13 has an actual hardware component (a computer readable medium) and the computer readable medium is considered the only statutory component of the system claim.**

3.   Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the actual components of a system. The applicant claims a "system"; however, none of the

components listed appear to indicate actual components of a system. The items listed

all appear to be non-functional descriptive **and possibly functional** material (a

language component, an interface component and a translation component). However,

for a system claim, the type of components expected are (for example, the "**means**

for...") items listed for claim 14, with clearly defined interconnections between

components. Claim 13 provides further proof that the components claimed are merely

software items and their use (for example, "to enable...", "to describe...", etc.) specified

in the claims merely considered intended use. **The interface component still does not**

appear to be tied to the rest of the claim. That is, it is merely listed and does not

appear to be utilized.

4.   Claims 33-34 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. There is not clear antecedent basis provided for the

"parameterized monad comprehension notation" in claim 6. Therefore, it is not clear

what is claimed and the applicant should note that unclear features are not entitled

patentable weight.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   Claims 1-6, 8-9, and 11-25, and 33-34 are rejected under 35 U.S.C. 102(b) as

being anticipated by Acton et al. (6,209,040). **The previous rejection is still**

considered proper and is hereby repeated with comments to the applicant's

remarks in bold.

What is claimed is:	Acton
1. A system to facilitate generalized comprehension in an imperative language, comprising:	The C++ like language is considered to provide the features of the imperative language, see col. 1 lines 12-18 and col. 4 lines 22-24.
a language component **that receives...** programming of comprehension notations in an imperative language;	See the 2nd sentence of the abstract.
an interface component ... a meaning of the comprehension notations; and	See the abstract, specifically the 2nd through the 4th sentences. **The applicant claims that Acton does not teach comprehension notations; however, the applicant's comprehension notations is considered merely descriptive material. This is evidenced by its definitions in the applicant's abstract as having user defined types representing comprehension. Therefore, Acton provides for this feature via his abstract class, which requires user defined information to enable implementation, see col. 3 lines 52-57. Also, see col. 6 lines 11-16, which allows defining and accessing type information.**
a translation component ... execution of the comprehension notations in accordance with the imperative	See the 6th and 7th sentences of the abstract.

language.

2. The system of claim 1, the language component includes a generalized comprehension that performs operations on a fixed or list comprehension.

See col. 28 lines 25-30.

3. The system of claim 1, the interface component defines one or more methods for the generalized comprehension.

See that the interface is an abstract class (generalized).

4. The system of claim 1, the translation component includes at least one of just-in-time compilation techniques, interpretive techniques, and source code compilation techniques.

See col. 2 lines 44-48.

5. The system of claim 2, the language component enables users to define at least one of an implicit expression, an explicit expression, a mathematical expression, a database expression, and a processing expression in accordance with the generalized comprehension.

See table 12.

6. The system of claim 1, the comprehension notations ...

See the user defined types in summary.

8. The system of claim..., the interface component is associated with at least one of a final results function, an accumulation function for intermediate results, an early termination function, and a

The abstract function above serves as a default value.

default value.

9. The system of claim..., further comprising an assignment expression or a yield return statement.	See table 1 for an assignment expression.
11. The system of claim..., further comprising a relational database expression.	See col. 4 lines 30-46.
12. The system of claim 11, the relational database expression is employed for a query of a database.	See the cited portions above and note that the database and the interpreter are unaware of each Others existence and therefore, a query is inherently provided for.

As per claim 13, see col. 8 lines 41-43.

In reference to claims 14-15, see the rejection of claim 4. **The generalized comprehension expression is considered taught via the abstract class (generalized) in claim 1.**

The features of claims 16-17, 20 are taught via claim 1. **Also, see the rejection Of claim 14.**

Claims 18-19 are taught via col. 8 lines 41-57.

In reference to claim 21, see the rejection of claim 11.

As per claims 22-25, these are all features of an abstract class and are therefore, inherent in the rejection of claim 3 above. **See also the rejection of claim 14.**

Claims 33-34 are rejected as claim 6.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Acton in view of the applicant's choice of selection of a specific program, with its

inherent functions, to develop his interface. Furthermore, the name of specific

components is not considered sufficient to enable a new system. However, the specific

functions are not indicated by Acton. But as indicated above, it would have been

obvious to a person having ordinary skill in the art at the time of the invention to select a

specific development environment for its inherent features to simplify programming.

        As per claims 26-32, the specific functions utilized are considered a choice of

Design And furthermore, Acton is considered to provide for many of the features. For

example, See the rejection of claims 5-12 above. Furthermore, selecting a specific

feature to utilize would have been obvious to a person having ordinary skill in the art at

the time of the invention for the same reason that these features are not considered to

enable a new system; however, it would have been obvious to a person having ordinary

skill in the art at the Time of the invention to select a specific programming environment

to utilize to take advantage of its inherent features; such as ease of use and to take

advantage of specific functionality provided to enable the interface.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to John Chavis whose telephone number is (571) 272-

3720. The examiner can normally be reached on M-F, 9:00am-5:30pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC

John Chavis
Primary Examiner AU-2193